

✓ line 6, please delete "CK-b8" and replace therefor --CK-beta8--.

✓ At page 45, line 2, please delete "described hereub" and replace therefor  
--described herein--.

✓ At page 70, line 27, please delete "SEQ ID NO:\_\_\_ or SEQ ID NO:\_\_\_" and replace  
therefor --SEQ ID NO:2 or SEQ ID NO:20--; and  
line 28, please delete "encoded by the clone \_\_\_" and replace therefor  
--encoded by the clones HUEVO91 and HEMCZ56, respectively--.

✓ At page 105, lines 16-17, please delete "12301 Parklawn Drive, Rockville, Maryland  
20852", and replace therefor --10801 University Boulevard,  
Manassas, Virginia 20110-2209--.

***In the claims:***

✓ **Please amend the claims as follows:**

Please cancel claims 2-16, 17, 20, 23-36, and 40, without prejudice.

**Please add the following new claims:**

- Sub c9* ✓ --42. (New) An isolated polypeptide comprising an amino acid sequence selected  
from the group consisting of:
- (a) amino acid residue -27 to amino acid residue +147 as set forth in SEQ  
ID NO:2;
  - (b) amino acid residue -26 to amino acid residue +147 as set forth in SEQ  
ID NO:2;
  - (c) amino acid residue +1 to amino acid residue +147 as set forth in SEQ  
ID NO:2;
  - (d) a fragment of the polypeptide of SEQ ID NO:2, wherein the fragment  
has TNF-gamma-alpha activity;
  - (e) a full-length polypeptide having the amino acid sequence expressed  
by the cDNA plasmid contained in ATCC Deposit No. 75927;
- a2*

(f) a full-length polypeptide, excluding the N-terminal methionine residue, having the amino acid sequence expressed by the cDNA plasmid contained in ATCC Deposit No. 75927;

(g) a mature polypeptide having the amino acid sequence expressed by the cDNA plasmid contained in ATCC Deposit No. 75927; and

(h) a fragment of the polypeptide having the amino acid sequence expressed by the cDNA plasmid contained in ATCC Deposit No. 75927, wherein the fragment has TNF-gamma-alpha activity.

43. (New) The isolated polypeptide of claim 42 comprising amino acid residue - 27 to amino acid residue +147 as set forth in SEQ ID NO:2.

44. (New) The isolated polypeptide of claim 42 comprising amino acid residue - 26 to amino acid residue +147 as set forth in SEQ ID NO:2.

45. (New) The isolated polypeptide of claim 42 comprising amino acid residue +1 to amino acid residue +147 as set forth in SEQ ID NO:2.

46. (New) The isolated polypeptide of claim 42 comprising a full-length polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 75927.

47. (New) The isolated polypeptide of claim 42 comprising a full-length polypeptide, excluding the N-terminal methionine residue, having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 75927.

sub E3  
cont. 48. (New) The isolated polypeptide of claim 42 comprising a mature polypeptide having the amino acid sequence expressed by the human cDNA contained in ATCC Deposit No. 75927.

49. (New) The isolated polypeptide of claim 42 comprising a fragment of the amino acid sequence set forth in SEQ ID NO:2, wherein said fragment has TNF-gamma-alpha activity or binds an antibody specific for TNF-gamma-alpha.

50. (New) The isolated polypeptide of claim 49 wherein said fragment has TNF-gamma-alpha activity.

sub c10 51. (New) The isolated polypeptide of claim 49 wherein said fragment binds an antibody specific for TNF-gamma-alpha.

sub E17 52. (New) The isolated polypeptide of claim 42 wherein said polypeptide further comprises a heterologous polypeptide.

a2  
cont. 53. (New) The isolated polypeptide of claim 52 wherein said heterologous polypeptide is the Fc domain of immunoglobulin.

54. (New) A composition comprising the polypeptide of claim 42 and a pharmaceutically acceptable carrier.

sub B1 55. (New) An isolated polypeptide encoded by a nucleic acid molecule comprising a polynucleotide sequence selected from the group consisting of:

(a) a polynucleotide sequence of at least 30 contiguous nucleotides of SEQ ID NO:1;

Sub  
B1  
cont.

(b) a polynucleotide sequence of at least 30 contiguous nucleotides of the cDNA plasmid contained in ATCC Deposit No. 75927.

sub E67

56. (New) The isolated polypeptide of claim 55 which comprises (a).

57. (New) The isolated polypeptide of claim 56 wherein said polypeptide has TNF-gamma-alpha activity.

58. (New) The isolated polypeptide of claim 56 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

sub E77

59. (New) The isolated polypeptide of claim 55 which comprises (b).

60. (New) The isolated polypeptide of claim 59 wherein said polypeptide has TNF-gamma-alpha activity.

61. (New) The isolated polypeptide of claim 59 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

A2  
Cont.

sub E87

62. (New) The isolated polypeptide of claim 55 wherein said polypeptide further comprises a heterologous polypeptide.

63. (New) The isolated polypeptide of claim 62 wherein said heterologous polypeptide is the Fc domain of immunoglobulin.

64. (New) A composition comprising the polypeptide of claim 55 and a pharmaceutically acceptable carrier.

65. (New) An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence comprising at least 30 contiguous amino acid residues of SEQ ID NO:2; and

(b) an amino acid sequence comprising at least 30 contiguous amino acid residues encoded by the cDNA plasmid contained in ATCC Deposit No. 75927.

sub E<sup>10</sup> 66. ~~(New)~~ The isolated polypeptide of claim 65 which comprises (a).

67. (New) The isolated polypeptide of claim 66 wherein said polypeptide has TNF-gamma-alpha activity.

68. (New) The isolated polypeptide of claim 66 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

sub E<sup>11</sup> 69. ~~(New)~~ The isolated polypeptide of claim 65 which comprises (b).

70. (New) The isolated polypeptide of claim 69 wherein said polypeptide has TNF-gamma-alpha activity.


71. (New) The isolated polypeptide of claim 69 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

sub E<sup>12</sup> 72. ~~(New)~~ The isolated polypeptide of claim 65 wherein said polypeptide further comprises a heterologous polypeptide.

73. (New) The isolated polypeptide of claim 72 wherein said heterologous polypeptide is the Fc domain of immunoglobulin.

74. (New) A composition comprising the polypeptide of claim 65 and a pharmaceutically acceptable carrier.

75. (New) An isolated polypeptide comprising a first amino acid sequence 90% or more identical to a second amino acid sequence selected from the group consisting of:

- Sub B2* 
- (a) an amino acid sequence comprising amino acid residues -27 to 147 of SEQ ID NO:2;
  - (b) an amino acid sequence comprising amino acid residues -26 to 147 of SEQ ID NO:2; and
  - (c) an amino acid sequence comprising amino acid residues 1 to 147 of SEQ ID NO:2.

76. (New) The isolated polypeptide of claim 75 wherein said first amino acid sequence is 95% or more identical to said second amino acid sequence.

*sub E 147* 77. (New) The isolated polypeptide of claim 75 which comprises second amino acid sequence (a).

*a2 cont.* 78. (New) The isolated polypeptide of claim 77 wherein said polypeptide has TNF-gamma-alpha activity.

79. (New) The isolated polypeptide of claim 77 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

*sub E 157* 80. (New) The isolated polypeptide of claim 75 which comprises second amino acid sequence (b).

81. (New) The isolated polypeptide of claim 80 wherein said polypeptide has TNF-gamma-alpha activity.

82. (New) The isolated polypeptide of claim 80 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

sub E167 ~~E~~ 83. (New) The isolated polypeptide of claim 75 which comprises second amino acid sequence (c).

84. (New) The isolated polypeptide of claim 83 wherein said polypeptide has TNF-gamma-alpha activity.

85. (New) The isolated polypeptide of claim 83 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

sub E177 ~~E~~ 86. (New) The isolated polypeptide of claim 75 wherein said polypeptide further comprises a heterologous polypeptide.

87. (New) The isolated polypeptide of claim 86 wherein said heterologous polypeptide is the Fc domain of immunoglobulin.

88. (New) A composition comprising the polypeptide of claim 75 and a pharmaceutically acceptable carrier.

sub B3 89. (New) An isolated polypeptide encoded by a nucleic acid molecule comprising a polynucleotide which hybridizes to the complement of the polynucleotide set forth in SEQ ID NO:1 wherein said hybridization occurs under conditions comprising hybridization in a buffer consisting of 50% formamide, 5x SSC, 50 mM sodium phosphate

*Sub B3 cont*  
(pH 7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 µg/ml denatured, sheared salmon sperm DNA at 42°C and wash in a solution consisting of 0.1x SSC at 65°C.

90. (New) The isolated polypeptide of claim 89 wherein said polypeptide has TNF-gamma-alpha activity.

91. (New) The isolated polypeptide of claim 89 wherein said polypeptide binds an antibody specific for TNF-gamma-alpha.

*sub E19*  
92. (New) The isolated polypeptide of claim 89 wherein said polypeptide further comprises a heterologous polypeptide.

*A2 cont*  
93. (New) The isolated polypeptide of claim 92 wherein said heterologous polypeptide is the Fc domain of immunoglobulin.

94. (New) A composition comprising the polypeptide of claim 89 and a pharmaceutically acceptable carrier.--

### Remarks

Originally filed claims 1, 18-19, 21-22, 37-39, and 41 and new claims 42-94 will be pending upon entry of this amendment.

The specification has been amended and claims 2-16, 17, 20, 23-36, and 40 have been canceled in favor of new claims 42-94 in order to correct typographical errors, to update the address of the American Type Culture Collection, and to more particularly point out and distinctly claim the subject matter Applicants regard as the invention.